

February 14, 2017

TO: Catherine Dorau, Associate Planner

FROM: <sup>DJM</sup> Duane J. Martin, P.E., Town Engineer  
<sup>CRC</sup> Charles R. Guarino, P.E., Civil Engineer II

SUBJECT: 660 Mountain Road – Gledhill Estates

Based on our review of the plans titled "Proposed Gledhill Estates 660 Mountain West Hartford, Connecticut Prepared for: Gledhill Estates, LLC 41 Crossroads Plaza, Suite 164 West Hartford, Connecticut Date: 1/20/17", and the Traffic Impact Assessment dated 1/19/17, we offer the following engineering comments:

1. The plans shall include a typical roadway cross-section.
2. The plans shall include the roadway profile.
3. Narrow curvilinear roadways historically have the curbing damaged or pushed out of place during winter snow plowing operations. We recommend precast concrete curbing or granite curbing should be used to resist plow damage.
4. Granite curbing is required for the cul-de-sac.
5. Special needs children get picked up by a 16-passenger bus in front of their homes. Using autoturn or similar software the applicant must demonstrate if a small bus and a garbage truck can turn around in the cul-de-sac without backing up.
6. Please show on the plans the existing double box culvert under Mountain Road, label both the inlet and outlet elevations as well as the culvert size.
7. At the downstream end of the Mountain Road culvert there is a 20ft. x 20ft. right-of-way easement in favor of the Town of West Hartford (vol. 1259 pgs. 59-61). To allow the Town maintenance access we recommend the easement should be enlarged to 20ft. x 50ft., the 50ft. dimension would be parallel to the brook.
8. To allow residents in the development to walk to the adjoining neighborhood and considering the Town's Complete Streets Policy, we recommend the Mountain Road sidewalk should be extended to Fairfield Road.



9. There is a storm sewer that runs between 35 and 39 Fairfield Road and outlets to a small watercourse near the northerly property line of the Gledhill property. The storm sewer and water course from the storm sewer outlet and along the easterly property line must be shown on the plans.
10. The existing house in the flood plain will become unit 17, it shall comply with West Hartford Zoning Chapter 177-8 Special Flood Hazard Area E.1.j.1-4 and 177-8.E.2. Specific Standards.
11. A street name sign is required. In addition, it shall include a 'private street' sign and a 'no outlet' sign.
12. Will parking be allowed in the roadway or cul-de-sac?
13. Show the grading for the temporary sediment traps.
14. Show detail of proposed retaining wall.
15. Outline sequence of construction including grading, utilities, drainage, roadway, temporary sediment traps, buildings, etc.
16. Merestones are required around the perimeter of the development.
17. Label the elevations of any basement window sills and hatchways.
18. The 2002 Connecticut Guidelines for Soil Erosion and Sediment Control Manual (Pg. 5-2-5) states "Where the slope is to be vegetated and mowed the slope shall be no steeper than 3:1". Many of the proposed slopes on the plan are only 2:1.
19. Sheet 3.02, level spreader detail, please dimension the depth of the concrete level spreader footing. Provide calculations to show if the proposed "clean washed gravel" can resist the erosive forces from the 100year storm flow rates.
20. To determine the impact on abutting properties the existing contours shall extend a minimum of 20ft. onto the abutting properties.
21. The Governors Row condos abutting the southerly property line need to be shown on the plans to determine if they will be adversely affected.
22. The lowest floor elevation including the basement must be labeled.
23. The base flood elevation lines and numeric values shall be shown on the plans similar to how it's depicted on the FEMA map.

24. Both of the common 4" foundation drains are over 700ft. long. For maintenance purposes a clean out is required at each house connection. In addition, a structure is required at each change of direction and junction point. To reduce the risk of clogging, we recommend the pipe have a smooth interior wall and be enlarged. To be self-cleaning the minimum allowable grade is 0.5 percent. All inverts shall be labeled on the plans.
25. To keep land disturbance to a minimum, we recommend the project should be built in phases.
26. Please show stockpile locations.
27. Please provide documentation showing the 1.62 acre decrease in impervious area post development.
28. What type of vegetation is proposed downstream of the level spreader?
29. Please provide a summary table comparing pre and post development storm water flow rates for the 2, 5, 10, 25, 50 and 100yr. storm events.

CRG:sr